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## ABSTRACT

The 127 citations in this annotated bibliography provide a substantial resource describing recent investigations on the regulation of water quality. The listing, prepared by NAL's Water Quality Information Center, is part of the Quick Bibliography Series of the National Agricultural Library (NAL), intended primarily for communicating current awareness, and not for use as an in-depth exhaustive bibliography on the subject. Citations were entered in the AGRICOLA database between January 1979 and January 1995 and are listed alphabetically by title. The NAL Call Number is provided for each item. The listing results from a computerized search strategy that includes descriptors for resource type (groundwater, surface water, lake or pond), pollution source (fertilizers, pesticides, agriculture, agrichemicals, nonpoint pollution, nutrients, and livestock waste), and legal terms (legal, illegal, law, legislation, standards, guidelines, regulation, hearing, rule, act, or policy). (LZ)

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# Regulating Water Quality: Policy, Standards and Laws

January 1993 - January 1995

Quick Bibliography Series: QB 95-10  
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127 citations from AGRICOLA

Joe Makuch  
Water Quality Information Center

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Canadian Journal of Soil Science 1988 v 68(1): 17-27

DeJong, R. Comparison of two soil-water models under semi-arid growing conditions

Ver: AGRICOLA

Remarks: Not available at IU or in region.

NAL CA: 56.8 C162

Auth: C. Johnson CCL Maxcost: \$15.00

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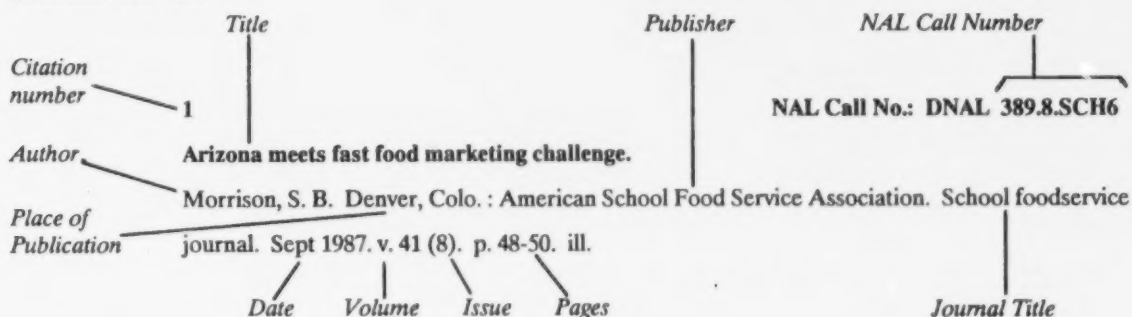
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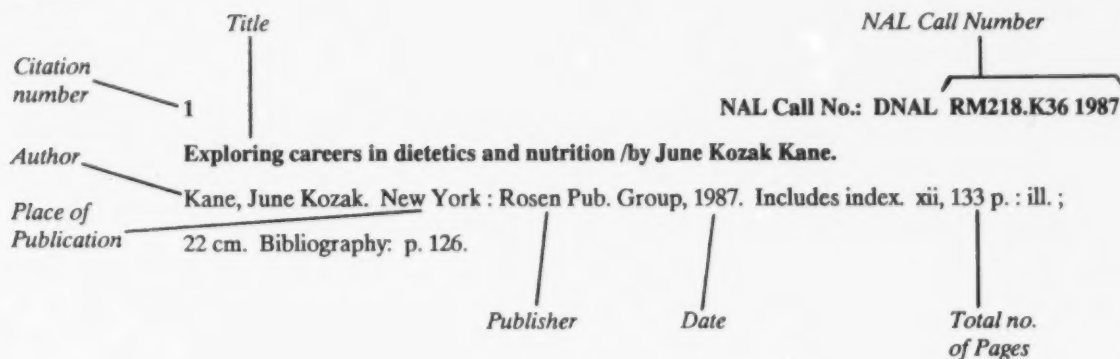
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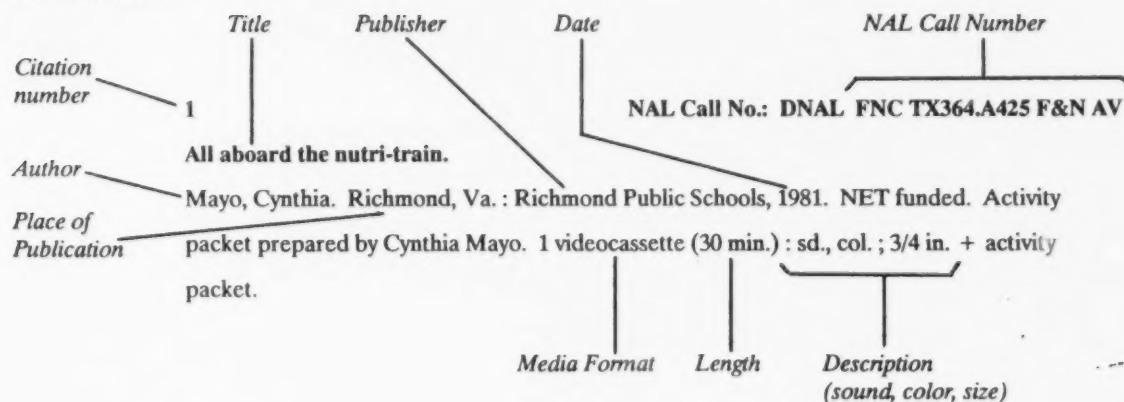
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## Regulating Water Quality: Policy, Standards and Laws

### SEARCH STRATEGY

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| S11 | 154    | S9 AND S10                                                                                                                                                                                            |
| S12 | 153    | RD S11 (unique items)                                                                                                                                                                                 |

## Regulating Water Quality: Policy, Standards and Laws

**1** NAL Call No: ArUKF5624.A75C66 1992  
7th Annual Conference on Wetlands and the Law  
course materials.

American Bar Association, Section of Natural Resources, Energy, and Environmental Law, American Bar Association, Water Quality Committee, Environmental Law Institute

Conference on Wetlands Law and Regulation 7th : 1992 : Washington, D.C.

Chicago, Ill. : American Bar Association : 1002 [i.e. 1 v. (various pagings) : ill., maps ; 28 cm. June 3-4, 1002 [i.e. 1992], Capital Hilton Hotel, Washington, D.C.

*Language:* English

*Descriptors:* Wetlands; Wetland conservation

**2** NAL Call No: TD420.A1P7  
Agricultural and municipal use of wastewater.

Bouwer, H.

Oxford : Pergamon Press.

Water science and technology : a journal of the International Association on Water Pollution Research and Control v. 26 (7/8): p. 1583-1591; 1992. In the series analytic: Water Quality International '92. Part 4 / edited by M. Suzuki, et al. Proceedings of the Sixteenth Biennial Conference of the International Association on Water Pollution Research and Control, held May 24-30, 1992, Washington, D.C. Includes references.

*Language:* English

*Descriptors:* Refuse; Waste water treatment; Water reuse; Irrigation water; Water quality; Quality standards

**3** NAL Call No: GB1001.G76  
Agricultural chemical news: apparent shift in EPA's ground water policy.

Cohen, S.

Dublin, OH : Ground Water Pub. Co., c1993.

Ground water monitoring & remediation v. 14 (3): p. 97-98; 1994.

*Language:* English

*Descriptors:* Pesticides; Groundwater; Water policy; Groundwater pollution; Monitoring; Environmental legislation; Federal government; State government

**4** NAL Call No: aTD428.A37M34 1992  
Agricultural nonpoint source pollution and economic incentive policies issues in the reauthorization of the Clean Water Act : water quality.

Malik, Arun S.; Larson, Bruce A.; Ribaudo, Marc  
United States, Dept. of Agriculture, Economic Research Service, Resources and Technology Division

Washington, DC : U.S. Dept. of Agriculture, Economic Research Service, Resources and Technology Division,

iv, 14 p. ; 28 cm. (ERS staff report ; no. AGES 9229). Cover title. "November 1992", P. iii. Includes bibliographical references (p. 12-14).

*Language:* English

*Descriptors:* Agricultural pollution; Water

**5** NAL Call No: TD195.A34B34 1991  
Agriculture and the polluter pays principle a study of six EC countries.

Baldock, David; Bennett, Graham

London : Institute for European Environmental Policy,

231 p. : ill., maps ; 24 cm. "December 1991," T.p. verso. Includes bibliographical references.

*Language:* English

*Descriptors:* Agricultural pollution; Water; Liability for water pollution damages

**6** NAL Call No: 57.8 So4  
Agriculture targeted in debate over Clean Water Act.

Myrick, C.

St. Louis, Mo. : Solutions Magazine.

Solutions : journal of the fluid fertilizer industry v. 37 (5): p. 42-43; 1993 Jul.

*Language:* English

*Descriptors:* U.S.A.; Cabt; Agricultural chemicals; Environmental legislation; Water pollution; Pollution control

**7** NAL Call No: KF3790.F74 1993  
Air and water pollution regulation accomplishments and economic consequences.

Freedman, Martin; Jaggi, Bikki

Westport, Conn. : Quorum Books,

xii, 266 p. : ill. ; 25 cm. Includes bibliographical references and index.

*Language:* English

*Descriptors:* Water; Air; Law

**8** NAL Call No: TD171.U5  
Amending the Safe Drinking Water Act: view from Congress.

## Quick Bibliography Series

Waxman, H.  
Washington, U.S. Environmental Protection Agency.  
EPA journal v. 20 (1/2): p. 32-33; 1994. Includes references.

*Language:* English

*Descriptors:* U.S.A.; Cabt; Drinking water; Legislation; Water quality; Contamination

9 NAL Call No: 275.29 T313  
**Animal waste management.**  
Sweeten, J.M.; Baird, C.; Manning, L.  
College Station, Tex. : The Service.  
Leaflet L - Texas Agricultural Extension Service,  
Texas A & M University System (5043): 4 p.; 1991  
Sep. Includes references.

*Language:* English

*Descriptors:* Texas; Animal wastes; Feedlots; Dairy farms; Waste disposal; Regulation; Runoff; Water pollution; Water quality

10 NAL Call No: TD427.T7A77 1988  
**Arsenic water quality standards criteria summaries a compilation of state/federal criteria. (Water quality standards criteria summaries.)**  
United States, Environmental Protection Agency, Office of Water Regulations and Standards, Criteria and Standards Division, Standards Branch, Battelle Memorial Institute  
Washington, D.C. : U.S. Environmental Protection Agency ; Springfield, VA : distributed by NTIS., 57 p. ; 28 cm. Cover title. Contract 68-03-3534. "Office of Water Regulation and Standards", Cover. September 1988. EPA 440/5-88/018. PB89-141501. Includes bibliographical references (p. 4-6).

*Language:* English

*Descriptors:* Arsenic wastes; Water quality; Water

11 NAL Call No: HD1401.S75  
**Atrazine and water quality: an updated CEEPES analysis.**  
Ames, Iowa : Center for Agricultural and Rural Development, 1986.  
Staff report / (59): 49 p.; 1992 Dec. Includes references.

*Language:* English

*Descriptors:* Corn belt states of U.S.A.; Cabt; Zea mays; Sorghum; Atrazine; Water quality; Crop yield; Application rates

12 NAL Call No: 47.8 W89  
**Avoiding pollution from poultry manure.**  
Archer, J.  
Oxford : Butterworth-Heinenmann Ltd.  
World's poultry science journal v. 49 (2): p. 167-170; 1993 Jul. Includes references.

*Language:* English

*Descriptors:* Uk; Cabt; Poultry manure; Nitrates; Surface water; Water pollution; Groundwater pollution; Air pollution; Odors; Legislation

13 NAL Call No: TD196.O76C36 1992  
**Canadian water quality guidelines for organotins.**  
Moore, D. R. G.  
Canada, Ecosystem Sciences and Evaluation Directorate, Canada, Ecosystem Sciences and Evaluation Directorate, Eco-Health Branch  
Ottawa, Ont. : Ecosystem Sciences and Evaluation Directorate, Eco-Health Branch., vii, 145 p. : ill. ; 28 cm. (Scientific series (Canada. Ecosystem Sciences and Evaluation Directorate) ; no. 191.). Summary in French. Errata sheet inserted. At head of title: Environment Canada, Conservation and Protection. Includes bibliographical references (p. 31-40).

*Language:* English

*Descriptors:* Water quality monitoring; Organotin compounds

14 NAL Call No: TD226.C388 1992  
**Canadian water quality guidelines for triallate.**  
Kent, R. A.; Trotter, D. M.; Gareau, J.  
Canada, Ecosystem Sciences and Evaluation Directorate, Eco-health Branch, Canada, Conservation and Protection  
Ottawa, Ont. : Ecosystem Sciences and Evaluation Directorate, Eco-Health Branch., v, 47 p. ; 28 cm. (Scientific series (Canada. Ecosystem Sciences and Evaluation Directorate) ; no. 195.). Abstract also in French. First draft prepared under contract by: D.M. Trotter and J. Gareau. At head of title: Environment Canada, Conservation and Protection. Includes bibliographical references (p. 15-19).

*Language:* English

*Descriptors:* Water quality management; Herbicides; Water quality

15 NAL Call No: 292.9 C1282  
**Changing practices in ground water management, the pros and cons of regulation.**

## Regulating Water Quality: Policy, Standards and Laws

Riverside, Calif. : The Center.

Report - California Water Resources Center, University of California (77): 205 p.; 1992 Sep. Proceedings of the 18th biennial conference on ground water, held September 16-17, 1991, Sacramento, California.

*Language:* English

*Descriptors:* California; Kansas; Arkansas; Arizona; Groundwater; Water management; Regulations; Groundwater pollution; State government; Federal government; Water quality; Wells; Nitrates

**16** **NAL Call No: TD171.U5**  
**The Clean Water Act: has it worked? We have a long way to go.**

Adler, R.

Washington, U.S. Environmental Protection Agency.

EPA journal v. 20 (1/2): p. 10-14; 1994.

*Language:* English

*Descriptors:* Water pollution; Water quality; Legislation; Environmental protection; Water recreation; Drinking water; Pollutants; Fish; Shellfish; Food contamination; Wetlands

**17** **NAL Call No: Q225.I7**  
**Cleaner water, but not clean enough.**

Foran, J.A.; Adler, R.W.

Richardson, TX : The University of Texas at Dallas.

Issues in science and technology v. 10 (2): p. 33-39; 1993-1994. Includes references.

*Language:* English

*Descriptors:* U.S.A.; Cabt; Water quality; Environmental legislation; Water pollution; Pollution control

**18** **NAL Call No: TD403.G7**  
**Common sense in ground-water protection and management in the United States.**

LeGrand, H.E.; Rosen, L.

Dublin, Ohio : Ground Water Pub. Co.

Ground water v. 30 (6): p. 867-872; 1992 Nov. Includes references.

*Language:* English

*Descriptors:* U.S.A.; Groundwater pollution; Protection; Management; Legislation; Policy

**19** **NAL Call No: HD1775.A2A5**  
**Compliance with environmental regulations**

**protecting water quality.**

Molnar, J.J.; Van Woerkum, C.M.J.; Perez, K.

Auburn, Ala. : The Service.

Alabama agribusiness - Auburn University, Alabama Cooperative Extension Service v. 31 (1): p. 9-10; 1992.

*Language:* English

*Descriptors:* U.S.A.; Netherlands; Water quality; Animal wastes; Animal manures; Environmental legislation; Intensive livestock farming

**20** **NAL Call No: SB610.W39**  
**Computer models for fate assessment during the registration process: data needs.**

Behl, E.

Champaign, Ill. : The Society.

Weed technology : a journal of the Weed Science Society of America v. 6 (3): p. 696-700; 1992 Jul. Paper presented at a Symposium on the, "Role of Modeling in Regulatory Affairs," at the Weed Science Society of America, February 4, 1991, Louisville, Kentucky. Includes references.

*Language:* English

*Descriptors:* Pesticides; Registration; Simulation models; Groundwater; Water quality

**21** **NAL Call No: TD420.W374**  
**Contrasting problems of implementing European Community water protection zone policies in Ireland and the UK.**

Foster, I.D.L.; Thorn, R.H.

London : The Institution of Water and Environmental Management.

Water and environmental management v. 7 (1): p. 62-67; 1993 Feb. Includes references.

*Language:* English

*Descriptors:* Uk; Irish republic; Water pollution; Prevention; Nitrates; Pollution control; Policy; Legislation; European communities

*Abstract:* The 1991 EC nitrate Directive has significant implications for agricultural and pollution prevention enforcement agencies throughout the European Community. Contrasting physical backgrounds, water supply sources and leaching rates, together with pre-existing nationally-based pollution control policies, means that implementing the Directive will cause different problems for member states. This paper examines the contrasting physical and legislative backgrounds in Ireland and the UK and looks at some of the problems in imple-

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menting EC policy.

**22** NAL Call No: TD433.C67 1992  
**The Cost of compliance with the proposed federal drinking water standards for radionuclides final report. (Cost of compliance, radionuclides.)**  
RCG/Hagler, Bailly, Inc, American Water Works Association, Water Industry Technical Action Panel  
Denver, CO : Water Industry Technical Action Fund, American Water Works Association.,  
1 v. (various pagings) : ill. ; 28 cm. Spine title: Cost of compliance, radionuclides. Prepared for American Water Works Association, Water Industry Technical Action Panel. October 10, 1991. Includes bibliographical references.

*Language:* English

*Descriptors:* Drinking water; Radioactive pollution of water; Radon; Radium; Uranium

**23** NAL Call No: 44.8 J822  
**Dairy manure and plant nutrient management issues affecting water quality and the dairy industry.**  
Lanyon, L.E.  
Champaign, Ill. : American Dairy Science Association.  
Journal of dairy science v. 77 (7): p. 1999-2007; 1994 Jul. Includes references.

*Language:* English

*Descriptors:* U.S.A.; Cabt; Cattle manure; Water pollution; Pollution control; Dairy farms; Cattle feeding; Production costs; Environmental policy

*Abstract:* Specific requirements for dairy manure management to protect water quality from nutrient pollution depend on the organization of individual farms. Further, the management requirements and options are different for point (farmstead) and nonpoint (field-applied) sources of pollution from farms. A formal management process can guide decisions about existing crop nutrient utilization potential, provide a framework for tracking nutrients supplied to crops, and identify future requirements for dairy manure management to protect water quality. Farm managers can use the process to plan daily activities, to assess annual nutrient management performance, and to chart future requirements as herd size increases. Agronomic measures of nutrient balance and tracking of inputs and outputs for various farm management units can provide the quantitative

basis for management to allocate better manure to fields, to modify dairy rations, or to develop alternatives to on-farm manure application. Changes in agricultural production since World War II have contributed to a shift from land-based dairy production to a reliance on capital factors of production supplied by the dairy industry. Meanwhile, management of dairy manure to meet increasingly stringent water quality protection requirements is still a land-based activity. Involving the dairy industry and off-farm stakeholders as participants in the management process for field, farm, and regional dairy production can be the basis for decision-making to reconcile the sometimes conflicting demands of production and water quality protection.

**24** NAL Call No: KF27.P8968 1992d  
**DeLauro-Lowey Water Pollution Control and Estuary Restoration Financing Act hearing before the Subcommittee on Water Resources of the Committee on Public Works and Transportation, House of Representatives, One Hundred Second Congress, second session, on H.R. 5070, to amend the Federal Water Pollution Control Act to provide special funding to states for implementation of national estuary conservation and management plans, and for other purposes, October 13, 1992 in Milford, CT.**

United States. Congress. House. Committee on Public Works and Transportation. Subcommittee on Water Resources

Washington : U.S. G.P.O. : For sale by the U.S. G.P.O., Supt. of Docs., Congressional Sales Office; Y 4.P 96/11:102-87.

xxvii, 185 p. ; 24 cm. Distributed to some depository libraries in microfiche. Shipping list no.: 93-0142-P. 102-87. Includes bibliographical references.

*Language:* English

*Descriptors:* Estuaries; Estuarine pollution; Estuarine area conservation

**25** NAL Call No: TD224.C3D45 1991  
**Delta water quality a report to the Legislature on trihalomethanes and the quality of drinking water available from the Sacramento-San Joaquin Delta.**

California, State Water Resources Control Board  
Sacramento : The Board.,  
viii, 41, 4 p. : maps ; 28 cm. October 1991.

*Language:* English

## Regulating Water Quality: Policy, Standards and Laws

*Descriptors:* Water quality; Drinking water; Trihalomethanes

26 NAL Call No: TD420.A1P7  
**Determining tradeoffs between water quality and profitability in agricultural production: implications for nonpoint source pollution policy.**

Contant, C.K.; Duffy, M.D.; Holub, M.A.  
Oxford ; New York : Pergamon Press, c1981-.  
Water science and technology : a journal of the International Association on Water Pollution Research v. 28 (3/5): p. 27-34; 1993. Paper presented at the IAWQ First International Conference on "Diffuse (Nonpoint) Pollution: Sources, Prevention, Impact, Abatement." September 19-24, 1993, Chicago, Illinois. Includes references.

*Language:* English

*Descriptors:* Iowa; Cabt; Water pollution; Sources; Agricultural production; Water quality

27 NAL Call No: HC79.E5E5  
**Development of a decision support system for prioritization of multimedia dischargers.**

Keyes, A.M.; Palmer, R.N.  
New York, N.Y. : Springer-Verlag.  
Environmental management v. 17 (5): p. 601-612; 1993 Sep. Includes references.

*Language:* English

*Descriptors:* Water pollution; Air pollution; Hazards; Wastes; Risk; Environmental protection; Government organizations; Regulations; Environmental impact

28 NAL Call No: 292.8 W295  
**Economic and environmental impacts of water quality protection policies. 1. Framework for regional analysis.**

Bernardo, D.J.; Mapp, H.P.; Sabbagh, G.J.; Geleta, S.; Watkins, K.B.; Elliott, R.L.; Stone, J.F.  
Washington : American Geophysical Union, 1965-.  
Water resources research v. 29 (9): p. 3069-3079; 1993 Sep. Includes references.

*Language:* English

*Descriptors:* Groundwater pollution; Groundwater; Water quality; Water policy; Agricultural chemicals; Agricultural production; Economic impact; Environmental impact; Simulation models; Mathematical models; Programming; Models

*Abstract:* Agricultural production systems provide some unique challenges for assessing the regional

impacts of water quality protection policies. A modeling framework is proposed for assessing the environmental and economic consequences of groundwater quality protection policies at the regional level. The model consists of three components: (1) a crop simulation/chemical transport model, (2) a regional economic optimization model, and (3) an aquifer groundwater flow model. The three submodels are linked and run recursively to simulate producer response to alternative water quality policies over a multiple-year time horizon. Model solutions provide projections of production practices employed on various resource situations across the region. Economic evaluation of alternative policies may be based upon regional agricultural income, crop production levels, input use, and changes in aquifer water levels over time. Measures of agricultural nonpoint source pollution provided by the model include nitrate, phosphorus and pesticide loadings in deep percolation and runoff water, as well as sediment losses.

29 NAL Call No: 292.8 W295  
**Economic and environmental impacts of water quality protection policies. 2. Application to the Central High Plains.**

Bernardo, D.J.; Mapp, H.P.; Sabbagh, G.J.; Geleta, S.; Watkins, K.B.; Elliott, R.L.; Stone, J.F.  
Washington : American Geophysical Union, 1965-.  
Water resources research v. 29 (9): p. 3081-3091; 1993 Sep. Includes references.

*Language:* English

*Descriptors:* Oklahoma; Cabt; Kansas; Cabt; Texas; Cabt; New Mexico; Cabt; Colorado; Cabt; Groundwater pollution; Groundwater; Water quality; Water policy; Agricultural chemicals; Agricultural production; Economic impact; Environmental impact; Mathematical models; Programming; Simulation models; Models

*Abstract:* A three-stage modeling framework is applied to evaluate the potential economic and environmental impacts of agricultural groundwater protection policies in the Central High Plains Region. Three alternative policies (limitations on total nitrogen applications, limitations on unit-area nitrogen applications, and restrictions on the use of selected herbicides) are compared to a baseline scenario that reflects the absence of any form of groundwater quality protection measures. In general, nitrogen restrictions are more effective in reducing nitrate loadings in percolation water if implemented on a unit-area basis rather than as a total (farm level) restriction. In contrast, the total

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restriction is more effective in controlling runoff losses of nitrogen. Both nitrogen restrictions have significant impacts on crop production levels and regional agricultural income, while the economic consequences of the pesticide restriction are much less pronounced. The proposed regional modeling framework provides critical information necessary to assess the economic and environmental tradeoffs of policy alternatives aimed at controlling agricultural nonpoint source pollution.

**30** NAL Call No: S544.3.N6N62  
**Economic Impacts of the Water Supply Watershed Protection Act.**

Cox, U.N.; Jennings, G.; Danielson, L.E.; Hogg, D.L.

Raleigh : North Carolina Agricultural Extension Service,.

AG (473-8): 7 p.; 1993 Sep. Includes references.

*Language:* English

*Descriptors:* North Carolina; Cabt; Watersheds; Water resources; Drinking water; Water quality; Waterways; Water pollution; Protection; Regulations; Land use; Residential areas; Industrialization; Economic impact

**31** NAL Call No: 292.9 Am34  
**Economic incentives for agricultural nonpoint source pollution control.**

Malik, A.S.; Larson, B.A.; Ribaud, M.

Herndon, Va. : American Water Resources Association.

Water resources bulletin v. 30 (3): p. 471-480; 1994 May. Includes references.

*Language:* English

*Descriptors:* Water pollution; Pollution control; Environmental legislation; Incentives; Economic policy

*Abstract:* The limited success of command-and-control policies for reducing nonpoint source (NPS) water pollution mandated under the Federal Water Pollution Control Act (FWPCA) has prompted increased interest in economic incentive policies as an alternative control mechanism. A variety of measures have been proposed ranging from fairly minor modifications of existing policies to substantial revisions including watershed-wide policies that rely on economic incentives. While greater use of economic incentive policies, such as environmental bonds and point/nonpoint source trading is being advocated in the reauthorization

of the CWA, the expected effects of individual proposals will be modest. The characteristics of NPS pollution, namely uncertainty and asymmetrical information, underscores that there is no single, ideal policy instrument for controlling the many types of agricultural NPS water pollution. Some of the usual incentive-based policies, such as effluent taxes, are not well suited to the task. Individual incentive policies proposed for the reauthorized CWA, such as pollution trading or deposit/refund systems, are not broadly applicable for heterogeneous pollution situations. Economic incentive policies may be appropriate in some cases, and command-and-control policies will be preferable in others and may in fact complement incentive policies.

**32** NAL Call No: TX501.R48  
**EEC water quality objectives for chemicals dangerous to aquatic environments (List 1).**

New York : Springer-Verlag, 1987-.

Reviews of environmental contamination and toxicology v. 137: p. 83-110; 1994. Includes references.

*Language:* English

*Descriptors:* Chemicals; Water quality; Guidelines; Policy; European communities

**33** NAL Call No: 475 J824  
**Environmental Protection Agency and other methods for the determination of priority pesticides and their transformation products in water.**

Barcelo, D.

Amsterdam : Elsevier Science Publishers.

Journal of chromatography v. 643 (1/2): p. 117-143; 1993 Jul23. Literature review. Includes references.

*Language:* English

*Descriptors:* U.S.A.; Europe; Pesticide residues; Water pollution; Determination; Regulations; Chromatography; European communities

**34** NAL Call No: QD1.A45  
**Environmental restoration and separation science.**

Reed, D.T.; Tasker, I.R.; Cunnane, J.C.; Vandegrift, G.F.

Washington, D.C. : American Chemical Society, 1974-.

ACS symposium series (509): p. 1-19; 1992. In the series analytic: Environmental remediation: Removing organic and metal ion pollutants /

## Regulating Water Quality: Policy, Standards and Laws

edited by G.F. Vandegrift, D.T. Reed and I.R. Tasker. Includes references.

*Language:* English

*Descriptors:* Soil pollution; Groundwater pollution; Reclamation; Separation; Wastes; Radioactive wastes; Regulations; Technology; Literature reviews

*Abstract:* The problem of environmental restoration, specifically the cleanup of contaminated soils and groundwaters, is one of the most important technical and societal problems we face today. To provide a background to this problem, the extent and cost, laws and regulations, important contaminants, and key issues in environmental restoration are discussed. A brief introduction to the role of separation science, in relation to environmental restoration, is also given.

**35** NAL Call No: 57.8 C734  
**EPA releases final sludge management rule.**

Goldstein, N.

Emmaus, Pa. : J.G. Press.

BioCycle v. 34 (1): p. 59-63; 1993 Jan.

*Language:* English

*Descriptors:* U.S.A.; Sewage sludge; Federal government; Regulations; Public health; Pollutants; Pathogens; Water policy; Wetlands; Application rates

**36** NAL Call No: KF27.G655 1991d  
**EPA's efforts to control the nation's worst toxic water pollution problems : hearing before the Environment, Energy, and Natural Resources Subcommittee of the Committee on Government Operations, House of Representatives, One Hundred Second Congress, first session, July 25, 1991.**

United States. Congress. House. Committee on Government Operations. Environment, Energy, and Natural Resources Subcommittee  
Washington : U.S. G.P.O. : For sale by the G.P.O., Supt. of Docs., Congressional Sales Office; Y 4.G 74/7:T 66/8.

iii, 284 p. : ill. ; 23 cm. Distributed to some depository libraries in microfiche. Shipping list no.: 93-0161-P. Includes bibliographical references.

*Language:* English

*Descriptors:* Water; Hazardous wastes; Pollution control industry

**37** NAL Call No: 302.8 T162  
**EPA's proposed cluster rule: the end of end-of-pipe.**

Hinsey, N.W.

Norcross, Ga. : The Technical Association of the Pulp and Paper Industry.

Tappi journal. , v. 77 (9): p. 65-74; 1994 Sep. Includes references.

*Language:* English

*Descriptors:* U.S.A.; Cabb; Pulp and paper industry; Air pollution; Water pollution; Pollution control; Public agencies; Pulp mill effluent; Factory fumes

**38** NAL Call No: 302.8 P11  
**EPA's proposed cluster rules shape U.S. paper industry's near future.**

Nichols, B.

San Francisco, Calif. : Miller Freeman Inc.

Pulp & paper v. 68 (9): p. 75-76, 81-82, 85; 1994 Sep. Includes references.

*Language:* English

*Descriptors:* U.S.A.; Cabb; Pulp and paper industry; Air pollutants; Pollutants; Environmental legislation; Federal government

**39** NAL Call No: 56.8 J822  
**Factors affecting attitudes toward groundwater pollution among Ohio farmers.**

Napier, T.L.; Brown, D.E.

Ankeny, Iowa : Soil Conservation Society of America, 1946-.

Journal of soil and water conservation v. 48 (5): p. 432-439; 1993 Sep. Includes references.

*Language:* English

*Descriptors:* Ohio; Cabb; Groundwater pollution; Farmers' attitudes; Learning theory; Farm management; Innovation adoption; Agricultural policy; Farm structure; Models; Agricultural chemicals; Health hazards; Knowledge; Perception

**40** NAL Call No: 275.29 W27P  
**Farming practices for groundwater protection.**

Adams, E.B.

Pullman, Wash. : The Service.

Extension bulletin - Washington State University, Cooperative Extension Service (1716): 4 p.; 1992 Aug. In subseries: Clean water for Washington.

*Language:* English

*Descriptors:* Washington; Groundwater pollution; Water conservation; Agricultural wastes; Waste

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disposal; Cultural methods; Environmental legislation

- 41** NAL Call No: 99.8 F768  
**Forest water quality protection: a comparison of regulatory and voluntary programs.**  
 Hawks, L.J.; Cubbage, F.W.; Haney, H.L. Jr; Shaffer, R.M.; Newman, D.H.  
 Bethesda, Md. : Society of American Foresters.  
 Journal of forestry v. 91 (5): p. 48-54; 1993 May.  
 Includes references.

*Language:* English

*Descriptors:* Maryland; Virginia; Forests; Water quality; Legislation; Resource conservation

- 42** NAL Call No: KK6251.L56 1993  
**Gewässerschutz und landwirtschaftliche Bodennutzung dargestellt am Beispiel der Düngung unter besonderer Berücksichtigung der Nitratproblematik [Protection of water and agricultural soil use].**  
 Linden, Werner,  
 Heidelberg : R. v. Decker.,  
 xii, 273 p. ; 22 cm. (Umwelt- und Technikrecht ; Bd. 19). Originally presented as the author's thesis, Universität Trier, 1993. Includes bibliographical references (p. 257-273).

*Language:* German

*Descriptors:* Water pollution; Agricultural pollution; Fertilizers

- 43** NAL Call No: TD171.U5  
**Great water bodies at a watershed.**  
 Marx, W.  
 Washington, D.C. : U.S. Environmental Protection Agency.  
 EPA journal v. 18 (4): p. 45-47; 1992 Sep.

*Language:* English

*Descriptors:* Pennsylvania; Maryland; Virginia; Watersheds; Body water; Water pollution; Environmental degradation; Environmental protection; Environmental policy

- 44** NAL Call No: 292.9 C1282  
**Ground water pollution update: causes and implications of slow remediation.**  
 Kopania, A.A.; Mackay, D.M.  
 Riverside, Calif. : The Center.  
 Report - California Water Resources Center, University of California (77): p. 57-62; 1992 Sep. In the series analytic: Changing practices in ground

water management, the pros and cons of regulation. Proceedings of the 18th biennial conference on ground water, held September 16-17, 1991, Sacramento, California. Includes references.

*Language:* English

*Descriptors:* California; Groundwater pollution; Organic compounds; Geology; Aquifers; Wells; Regulations; Water management

- 45** NAL Call No: SB321.G85  
**A guide for understanding the atrazine ground and surface water risk reduction measures.**  
 Storrs, Conn. : Coop. Ext. Serv., USDA, College of Agriculture & Natural Resources, Univ. of Conn.  
 The Grower : vegetable and small fruit newsletter v. 93 (4): p. 8-12; 1993 Apr.

*Language:* English

*Descriptors:* U.S.A.; Atrazine; Water pollution; Application rates; Pollution control; Regulations

- 46** NAL Call No: TD171.5.G3S33 1992  
**Handbuch Umwelt, Technik, Recht Luftreinhaltung, Abfallwirtschaft, Gewässerschutz, Lärmschutz, Umweltschutzbeauftragte, EG-Umweltrecht [Handbook on environment, technology, law]., 2., völlig neubearbeitete Aufl.**  
 Schedler, Karl  
 Ehningen bei Boblingen : Expert Verlag.  
 679 p. : ill., maps ; 21 cm. (Expert Bucherei). Includes bibliographical references (p. 624-668) and index.

*Language:* German

*Descriptors:* Environmental protection; Environmental law; Air quality management; Refuse and refuse disposal; Water quality management; Noise control

- 47** NAL Call No: HD9000.6.A1S88 Bd.1  
**Handelbare Emissionsrechte als Instrument zur Reduzierung der Nitratbelastung des Grundwassers durch die Landwirtschaft [Negotiable emissions rights as an instrument for reducing nitrate contamination of ground water by agriculture]., 1. Aufl.**  
 Niedermeyer, Dirk  
 Witterschlick, Bonn : Wehle.,  
 viii, 149 p. : ill. ; 21 cm. (Studien zur Wirtschafts- und Agrarpolitik ; Bd. 1). Includes bibliographical references (p. 140-149).

## Regulating Water Quality: Policy, Standards and Laws

*Language:* German

*Descriptors:* Nitrates; Water, underground; Agricultural pollution

**48** NAL Call No: TD201.U61  
**How clean is clean? An agricultural perspective.**  
Swader, F.  
Carbondale, Ill. : The Council,  
Water resources update / (94): p. 61-67; 1994. Special Issue: The Clean Water Act Revisited: Accomplishments and Issues for Reauthorization. Includes references.

*Language:* English

*Descriptors:* Water quality; Water pollution; Agriculture; Environmental policy; Agricultural policy; Usda

**49** NAL Call No: 275.29 Ok41C  
**How do we improve water quality in the Illinois River basin?**  
Stillwater, Okla. : The Service,  
Circular / (E-933): 12 p.; 1994 Apr.

*Language:* English

*Descriptors:* Illinois; Cabt; Water quality; Water pollution; Polluted water; Pollutants; Sources; Wastes; Waste disposal; Water erosion; Pollution by tourism; Recreation; Prevention; Law enforcement; Education

**50** NAL Call No: 290.9 Am32P  
**Impact of water quality laws on dairy profitability.**  
Leatham, D.J.; Schmucker, J.F.; Laceywell, R.D.; Schwart, R.B.; Lovell, A.; Allen, G.  
St. Joseph, Mich. : American Society of Agricultural Engineers,  
Paper / (914019): 11 p.; 1991. Paper presented at the "1991 International Summer Meeting sponsored by the American Society of Agricultural Engineers," June 23-26, 1991, Albuquerque, New Mexico. Includes references.

*Language:* English

*Descriptors:* Texas; Cabt; Dairy wastes; Waste water; Runoff; Water quality; Legislation

**51** NAL Call No: 290.9 Am32P  
**Impacts of agricultural chemical policies on groundwater quantity.**  
Sabbagh, G.J.; Mapp, H.P.; Stone, J.F.; Geleta, S.; Bernardo, D.J.; Elliott, R.L.; Watkins, K.B.  
St. Joseph, Mich. : American Society of Agricultural

Engineers,

Paper / (922024): 23 p.; 1992. Paper presented at the "1992 International Summer Meeting sponsored by the American Society of Agricultural Engineers," June 21-24, 1992, Charlotte, North Carolina. Includes references.

*Language:* English

*Descriptors:* Groundwater; Water quality; Chemicals

**52** NAL Call No: S494.5.S86S8  
**Impacts of uncertainty on policy costs of managing nonpoint source ground water contamination.**  
Halstead, J.M.; Batie, S.S.; Taylor, D.B.; Heatwole, C.D.; Diebel, P.L.; Kramer, R.A.  
Binghamton, N.Y. : Food Products Press.  
Journal of sustainable agriculture v. 1 (4): p. 29-48; 1991. Includes references.

*Language:* English

*Descriptors:* Virginia; Groundwater pollution; Nitrates; Stochastic models; Stochastic programming; Agricultural policy; Costs

**53** NAL Call No: SD143.S64  
**Implementation of the Clean Water Act (PL92-500) through best management practices implementation and monitoring.**  
Parker, T.  
Bethesda, Md. : The Society.  
Proceedings of the ... Society of American Foresters National Convention. p. 593-594; 1991. Meeting held Aug 4-7, 1991, San Francisco, California. Includes references.

*Language:* English

*Descriptors:* Oregon; Washington; Water quality; Water management; Water pollution; Law; Federal government; National forests

**54** NAL Call No: HD1401.S75  
**Integrating economic and environmental process models: an application of CEEPES to atrazine.**  
Cabe, R.; Kuch, P.J.; Shogren, J.F.  
Ames, Iowa : Center for Agricultural and Rural Development, 1986-.  
Staff report / (54): 22 p.; 1991 May. Includes references.

*Language:* English

*Descriptors:* U.S.A.; Cabt; Atrazine; Groundwater pollution; Surface water; Environmental policy; Agricultural chemicals; Economic evaluation;

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### Models

**55** NAL Call No: S589.7.E57 1994  
**Involving agricultural procedures in the development of localized best management practices.**

Waskom, R.M.; Walker, L.R.

St. Joseph, Mich. : American Society of Agricultural Engineers.

Environmentally sound agriculture : proceedings of the second conference : 20-22 April 1994 / . p. 22-29; 1994. Includes references.

*Language:* English

*Descriptors:* Colorado; Cabt; Groundwater pollution; Agricultural chemicals; Pollution control; Water quality; Environmental protection; Legislation; Management

**56** NAL Call No: TD172.I58 1987-no.1  
**Konsequenzen des Neuen Gewässerschutzrechts für die Unternehmen [Consequences of new water protection laws for businesses].**

Institut für Gewerbliche Wasserwirtschaft und Luftreinhaltung (North Rhine-Westphalia, Germany)

Köln : Institut für gewerbliche Wasserwirtschaft und Luftreinhaltung.

vi, 126 p. : ill. ; 21 cm. (IWL-Forum, 1987-1). Includes bibliographical references.

*Language:* German

**57** NAL Call No: 292.9 Am34  
**Laws and programs for controlling nonpoint source pollution in forest areas.**

Brown, T.C.; Brown, D.; Binkley, D.

Bethesda, Md. : American Water Resources Association.

Water resources bulletin v. 29 (1): p. 1-13; 1993 Jan. Includes references.

*Language:* English

*Descriptors:* U.S.A.; Cabt; Water pollution; Water quality; Pollution control; Monitoring; Legislation; Programs; State government; Federal government

*Abstract:* Recent federal legislation strengthened nonpoint source pollution regulations and helped to support and standardize pollution control efforts. A comprehensive review of current state and federal programs for forest areas reveals a substantial increase in agency water quality protection activities. These new efforts emphasize monitoring to assess the use and effectiveness of best management practices (BMPs). Recent monitoring reveals

that BMP use is increasing and that such use typically maintains water quality within standards. However, information is generally lacking about the cost effectiveness of BMP programs. Carefully designed and executed monitoring is the key to better specification of BMPs and more cost effective water quality protection.

**58** NAL Call No: TD370.L43 1988  
**Lead water quality standards criteria summaries : a compilation of state/federal criteria. (Water quality standards criteria summaries.)**

United States, Environmental Protection Agency, Office of Water Regulations and Standards, Criteria and Standards Division, Standards Branch, Battelle Memorial Institute

Washington, D.C. : U.S. Environmental Protection Agency ; Springfield, VA : distributed by NTIS., 56 p. ; 28 cm. Cover title. "Office of Water Regulation and Standards", Cover. September 1988. EPA 440/5-88/030. PB89-141626. Includes bibliographical references (p. 3-5).

*Language:* English

*Descriptors:* Water quality; Water; Lead

**59** NAL Call No: KF26.G676 1991a  
**Legal pollution of the Great Lakes hearing before the Subcommittee on Oversight of Government Management of the Committee on Governmental Affairs, United States Senate, One Hundred Second Congress, first session, October 4, 1991.**

United States. Congress. Senate. Committee on Governmental Affairs. Subcommittee on Oversight of Government Management

Washington : U.S. G.P.O. : For sale by the U.S. G.P.O., Supt. of Docs., Congressional Sales Office; Y 4.G 74/9:S.hrg.102-460.

iv, 206 p. : ill., maps ; 24 cm. (S. hrg. ; 102-460). Distributed to some depository libraries in microfiche. Shipping list no.: 92-217-P. Includes bibliographical references.

*Language:* English

*Descriptors:* Great Lakes; Water; Transboundary pollution; Liability for water pollution damages

**60** NAL Call No: SB379.A9A9  
**A management plan for the Santa Clara River.**

DePuydt, R.

Carpinteria, Calif. : Rincon Information Management Corporation.

California grower v. 17 (5): p. 44-46; 1993 May.

## Regulating Water Quality: Policy, Standards and Laws

*Language:* English

*Descriptors:* California; Rivers; Water management; Farmers' associations; Environmental management; Federal government; State government; Law; Habitat destruction; Mining

61 NAL Call No: 292.9 C1282  
**Managing California's water quality in the 1990s.**  
Maughan, W.D.  
Riverside, Calif. : The Center.  
Report - California Water Resources Center, University of California (77): p. 29-30; 1992 Sep. In the series analytic: Changing practices in ground water management, the pros and cons of regulation. Proceedings of the 18th biennial conference on ground water, held September 16-17, 1991, Sacramento, California.

*Language:* English

*Descriptors:* California; Water quality; Water management; Pollution; Regulations; State government

62 NAL Call No: 292.9 C1282  
**Managing the Salinas River Basin for quantity and quality.**  
Hurst, W.F.; Howard, L.L.; Win, U.  
Riverside, Calif. : The Center.  
Report - California Water Resources Center, University of California (77): p. 93-101; 1992 Sep. In the series analytic: Changing practices in ground water management, the pros and cons of regulation. Proceedings of the 18th biennial conference on ground water, held September 16-17, 1991, Sacramento, California. Includes references.

*Language:* English

*Descriptors:* California; Groundwater; Water management; Sea water; Pollution; Nitrates; Groundwater level; Water quality; State government; Organizations; Federal government

63 NAL Call No: TD427.M4M49 1988  
**Mercury water quality standards criteria summaries a compilation of state/federal criteria. (Water quality standards criteria summaries.)**  
United States, Environmental Protection Agency, Office of Water Regulations and Standards, Criteria and Standards Division, Standards Branch, Battelle Memorial Institute  
Washington, D.C. : U.S. Environmental Protection Agency ; Springfield, VA : distributed by NTIS., 60 p. ; 28 cm. Cover title. Contract 68-03-3534. "Office of Water Regulation and Standards", Cover.

September 1988. EPA 440/5-88/005. PB89-141378. Includes bibliographical references (p. 3-5).

*Language:* English

*Descriptors:* Mercury wastes; Water quality; Water

64 NAL Call No: 292.8 W295  
**Metamodels and nonpoint pollution policy in agriculture.**  
Bouzaher, A.; Lakshminarayan, P.G.; Cabe, R.; Carriquiry, A.; Gassman, P.W.; Shogren, J.F.  
Washington : American Geophysical Union, 1965-.  
Water resources research v. 29 (6): p. 1579-1587; 1993 Jun. Includes references.

*Language:* English

*Descriptors:* Herbicides; Agricultural chemicals; Groundwater; Surface water; Water pollution; Water quality; Simulation models; Statistical analysis

*Abstract:* Complex mathematical simulation models are generally used for quantitative measurement of the fate of agricultural chemicals in soil. But it is less efficient to use them directly for regional water quality assessments because of the large number of simulations required to cover the entire region and because the entire set of simulation runs must be repeated for each new policy. To make regional water quality impact assessment on a timely basis, a simplified technique called metamodeling is suggested. A metamodel summarizes the input-output relationships in a complex simulation model designed to mimic actual processes such as groundwater leaching. Metamodels are constructed and validated to predict groundwater and surface water concentrations of major corn and sorghum herbicides in the Corn Belt and Lake States regions of the United States. The usefulness of metamodeling in the evaluation of agricultural nonpoint pollution policies is illustrated using an integrated environmental economic modeling system. For the baseline scenario, we estimate that 1.2% of the regional soils will lead to groundwater detection of atrazine exceeding 0.12 micrograms/L, which compares well with the findings of an Environmental Protection Agency monitoring survey. The results suggest no-till practices could significantly reduce surface water concentration and a water quality policy, such as an atrazine ban, could increase soil erosion despite the conservation compliance provisions.

65 NAL Call No: TD224.M6M577 1992

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**Minnesota nonpoint source management progress in federal fiscal year 1992 the 1992 report to U.S. Environmental Protection Agency.** Minnesota Pollution Control Agency; United States, Environmental Protection Agency  
St. Paul : The Agency.,  
238 p. : maps ; 28 cm.

*Language:* English

*Descriptors:* Water quality management; Nonpoint source pollution

**66** NAL Call No: TD370.M59 1988  
**Mixing zones water quality standards criteria summaries a compilation of state/federal criteria. (Water quality standards criteria summaries.)** United States, Environmental Protection Agency, Office of Water Regulations and Standards, Criteria and Standards Division, Standards Branch, Battelle Memorial Institute  
Washington, D.C. : U.S. Environmental Protection Agency ; Springfield, VA : distributed by NTIS.,  
82 p. ; 28 cm. Cover title. Contract 68-03-3534. "Office of Water Regulation and Standards", Cover. September 1988. EPA 440/5-88/015. PB89-141477. Bibliography: p. 4-6.

*Language:* English

*Descriptors:* Water quality; Water

**67** NAL Call No: TD420.A1P7  
**Monitoring large scale wastewater reclamation systems, policy and experience.** Azov, Y.; Juanico, M.; Shelef, G.  
Oxford : Pergamon Press.  
Water science and technology : a journal of the International Association on Water Pollution Research and Control v. 26 (7/8): p. 1545-1553; 1992. In the series analytic: Water Quality International '92. Part 4 / edited by M. Suzuki, et al. Proceedings of the Sixteenth Biennial Conference of the International Association on Water Pollution Research and Control, held May 24-30, 1992, Washington, D.C. Includes references.

*Language:* English

*Descriptors:* Israel; Waste water treatment; Effluents; Quality controls; Monitoring; Programs; Water reuse; Irrigation water

**68** NAL Call No: S544.3.N7A4  
**New USDA incentive program an alternative to more farm regulations.** Sumner, K.

Middletown, N.Y. : Cornell Cooperative Ext., Orange County Agriculture Program, Education Center.

Agfocus : publication of Cornell Cooperative Extension, Orange County. p. 7, 16; 1992 Dec.

*Language:* English

*Descriptors:* Environmental protection; Water pollution; Residues; Water conservation; Incentives; Usda; Regulations

**69** NAL Call No: S590.S68  
**Nitrate leaching and intensive outdoor pig production.**

Worthington, T.R.; Danks, P.W.

Oxford : Blackwell Scientific Publications.

Soil use and management v. 8 (2): p. 56-60; 1992 Jun. Includes references.

*Language:* English

*Descriptors:* Uk; Pig farming; Nitrate; Leaching; Losses from soil; Nitrogen cycle; Water pollution; Legislation

*Abstract:* The production of pigs in outdoor units is gaining in popularity in the United Kingdom and is often concentrated on free-draining soils over important aquifers. Originally, stocking rates were sufficiently low to ensure the maintenance of a grass crop, but recently they have increased. Pigs are natural 'rooters' and wallowers and so cause damage to vegetation and soil structure. With overstocking these natural activities lead to considerable areas of bare, uncropped ground for much of the year. This paper assesses the potential for leaching of nitrate from such land, and makes recommendations for decreasing it.

**70** NAL Call No: HC103.Z9W32 1991  
**Nonpoint source pollution. (Nonpoint source.)**

Doyle, Paul; Morandi, Larry B.

National Conference of State Legislatures

Denver, Colo. : National Conference of State Legislatures.,

11 p. ; 28 cm. (Financing clean water.). Caption title. "August 1991.", P. [4] of cover. Running title: Nonpoint source. "Fourth in a series that presents state legislative options to finance water programs.", P. [1]. Includes bibliographical references (p. 10).

*Language:* English

*Descriptors:* Water quality management; Water, Underground; Water

## Regulating Water Quality: Policy, Standards and Laws

**71** NAL Call No: KF3790.A5N66 1992  
**Nonpoint source water pollution causes, consequences, and cures.**

National Center for Agricultural Law Research and Information (U.S.), Arkansas Water Resources Research Center

Fayetteville, Ark. : National Center for Agricultural Law Research and Information, University of Arkansas School of Law,.

1 v. (various pagings) : ill. ; 30 cm. At head of title: Conference handbook. "October 30-31, 1992", T.p. Includes bibliographical references.

*Language:* English

*Descriptors:* Water; Water, Underground; Agricultural pollution; Agriculture

**72** NAL Call No: HC107.N8R47  
**North Carolina regulatory programs to protect groundwater.**

Patte, D.E.M.; Danielson, L.E.

Raleigh, N.C. : North Carolina Agricultural Extension Service.

Resource economics (10): 8 p.; 1989 Dec.

*Language:* English

*Descriptors:* North Carolina; Groundwater pollution; Regulations; Water quality; Standards; Pollutants; Leaching; Pesticides; Water conservation

**73** NAL Call No: S589.7.E57 1994  
**Opportunities available to the vertical integrator or food processor to achieve water quality benefits in the dairy and poultry industries.**

Manale, A.; Narrod, C.; Trachtenberg, E.

St. Joseph, Mich. : American Society of Agricultural Engineers.

Environmentally sound agriculture : proceedings of the second conference : 20-22 April 1994 / . p. 344-352; 1994. Includes references.

*Language:* English

*Descriptors:* Dairy industry; Poultry industry; Animal wastes; Waste disposal; Management; Water pollution; Externalities; Pollution control; Environmental policy; Water quality

**74** NAL Call No: 292.9 C1282  
**Orange County ground water management.**

Mills, W.R.

Riverside, Calif. : The Center.

Report - California Water Resources Center, University of California (77): p. 133-138; 1992 Sep. In

the series analytic: Changing practices in ground water management, the pros and cons of regulation. Proceedings of the 18th biennial conference on ground water, held September 16-17, 1991, Sacramento, California.

*Language:* English

*Descriptors:* California; Groundwater; Water management; Waste water treatment; Local government; Urban areas; Watershed management; Water quality; Wells

**75** NAL Call No: SB610.2.B74  
**Pesticide contamination of water sources: current policies for protection and a multidisciplinary proposal to aid future planning.**

Carter, A.D.; Hollis, J.M.; Thompson, T.R.E.; Oakes, D.B.; Binney, R.

Surrey : BCPC Registered Office.

Brighton Crop Protection Conference-Weeds v. 2: p. 491-498; 1991. Conference held November 18-21, 1991, Brighton, England. Includes references.

*Language:* English

*Descriptors:* Uk; Pesticide residues; Water pollution; Water quality; Herbicides; Environmental policy

**76** NAL Call No: 56.8 J822  
**Pesticide fate research trends within a strict regulatory environment: the case of Germany.**

Gassman, P.W.

Ankeny, Iowa : Soil and Water Conservation Society of America.

Journal of soil and water conservation v. 48 (3): p. 178-187; 1993 May. Includes references.

*Language:* English

*Descriptors:* Germany; Groundwater pollution; Water quality; Pesticide residues; Contamination; Environmental legislation; Interdisciplinary research; Agricultural research

**77** NAL Call No: HD101.S6  
**Pesticide tax, cropping patterns, and water quality in south central Texas.**

Shumway, C.R.; Chesser, R.R.

Lexington, Ky. : Southern Agricultural Economics Association, 1993-.

Journal of agricultural and applied economics v. 26 (1): p. 224-240; 1994 Jul. Includes references.

*Language:* English

*Descriptors:* Texas; Cabt; Pesticides; Cropping sys-

## Quick Bibliography Series

tems; Water quality; Water supply; Taxes; Economic impact; Demand; Groundwater; Equations; Agricultural production

**Abstract:** The impact of an ad valorem pesticide tax on cropping patterns and pesticide use was examined in the South Central Texas Crop Reporting District. Output supply equations were econometrically estimated and used in the simulation. A 25 percent tax on pesticide was estimated to have major impacts on cropping patterns and on pesticide use. Assuming other input and output prices were unaffected, the supply of one important crop would fall by more than half. Demand for some of the highly soluble and persistent pesticides, which present the greatest threat to groundwater quality, would also decrease substantially (some as much as 50 percent).

**78** NAL Call No: S589.7.E57 1994  
**Petroleum storage tanks in the agriculture industry.**

Ward, C.G.; Harriman, J.R.; Fontaine, A.R.  
St. Joseph, Mich. : American Society of Agricultural Engineers.

Environmentally sound agriculture : proceedings of the second conference : 20-22 April 1994 / . p. 399-406; 1994. Includes references.

*Language:* English

**Descriptors:** Agricultural sector; Petroleum; Fuel tanks; Leakage; Environmental policy; Regulations; Environmental legislation; Groundwater pollution; Pollution control

**79** NAL Call No: S589.7.E57 1994  
**"Planned intervention": merging voluntary CAFO pollution abatement with command-and-control regulation.**

Frarey, L.C.; Jones, R.  
St. Joseph, Mich. : American Society of Agricultural Engineers.

Environmentally sound agriculture : proceedings of the second conference : 20-22 April 1994 / . p. 215-222; 1994. Includes references.

*Language:* English

**Descriptors:** Texas; Cabt; Livestock farming; Animal feeding; Water pollution; Point sources; Pollution control; Regulations; State government; Water quality; Objectives

**80** NAL Call No: 280.8 J822  
**Point/nonpoint source trading of pollution abate-**

**ment: choosing the right trading ratio.**

Malik, A.S.; Letson, D.; Crutchfield, S.R.

Ames, Iowa : American Agricultural Economics Association.

American journal of agricultural economics v. 75 (4): p. 959-967; 1993 Nov. Includes references.

*Language:* English

**Descriptors:** U.S.A.; Cabt; Pollution control; Law enforcement; Costs; Water quality; Trading; Uncertainty; Mathematical models; Ratios

**Abstract:** In programs for trading pollution abatement between point and nonpoint sources, the trading ratio specifies the rate at which nonpoint source abatement can be substituted for point source abatement. The appropriate value of this ratio is unclear because of qualitative differences between the two classes of sources. To identify the optimal trading ratio, we develop and analyze a model of point/nonpoint trading. We find the optimal trading ratio depends on the relative costs of enforcing point versus nonpoint reductions and on the uncertainty associated with nonpoint loadings. The uncertainty does not imply a lower bound for the optimal trading ratio.

**81** NAL Call No: SB317.5.H68  
**Political perspective on water quality impact.**

Bolusky, B.; Regelbrugge, C.

Alexandria, VA : American Society for Horticultural Science.

HortTechnology v. 2 (1): p. 80-82; 1992 Jan. Proceedings of the Workshop, "Impact of Runoff Water Quality on Future Nursery Crop Production," held at the 87th ASHS Annual Meeting, November 8, 1990, Tucson, Arizona.

*Language:* English

**Descriptors:** U.S.A.; Agriculture; Water use; Politics; Water quality; Government; Regulations; Environmental legislation; Pesticides; Surface water; Groundwater; Water pollution

**82** NAL Call No: KF27.S675 1992a  
**Pollution and the Columbia River protecting a national treasure : hearing before the Subcommittee on Regulation, Business Opportunities, and Energy of the Committee on Small Business, House of Representatives, One Hundred Second Congress, second session, Portland, OR, January 18, 1992.**

United States. Congress. House. Committee on Small Business. Subcommittee on Regulation,

## Regulating Water Quality: Policy, Standards and Laws

### Business Opportunities, and Energy

Washington : U.S. G.P.O. : For sale by the U.S. G.P.O., Supt. of Docs., Congressional Sales Office; Y 4.Sm 1:102-59.

iii, 123 p. : ill., map ; 24 cm. Distributed to some depository libraries in microfiche. Shipping list no: 92-0487-P. Serial no. 102-59. Includes bibliographical references.

*Language:* English

*Descriptors:* Columbia River; Water; Dioxins; Environmental policy

83

NAL Call No: TD420.A1P7

### Potential and present wastewater reuse in Jordan.

Gur, A.; Al Salem, S.S.

Oxford : Pergamon Press.

Water science and technology : a journal of the International Association on Water Pollution Research and Control v. 26 (7/8): p. 1573-1581; 1992. In the series analytic: Water Quality International '92. Part 4 / edited by M. Suzuki, et al. Proceedings of the Sixteenth Biennial Conference of the International Association on Water Pollution Research and Control, held May 24-30, 1992, Washington, D.C. Includes references.

*Language:* English

*Descriptors:* Jordan; Waste water treatment; Effluents; Water quality; Regulations; Water reuse

84

NAL Call No: S590.C63

### Precision nutrient management, impact on the environment and needs for the future.

Swader, F.; Woodward, M.

New York, N.Y. : Marcel Dekker.

Communications in soil science and plant analysis v. 25 (7/8): p. 881-888; 1994. Paper presented at the 1993 International Symposium on Soil Testing and Plant Analysis: Precision Nutrient Management, August 14-19, 1993, Olympia, Washington. Part 1. Includes references.

*Language:* English

*Descriptors:* U.S.A.; Cabi; Water quality; Water pollution; Point sources; Pollution control; Nutrients; Management; Application to land; Environmental protection; Profitability; Trends; Regulations; Sustainability

85

NAL Call No: QH541.5.L3P74 1991

### A Prescription for healthy Great Lakes report of the Program for Zero Discharge.

National Wildlife Federation, Canadian Institute

### for Environmental Law and Policy

Ann Arbor, Mich. : National Wildlife Federation, iv, 63 p. : ill ; 28 cm. Cover title. February, 1991. Includes bibliographical references.

*Language:* English

*Descriptors:* Ecology; Water

86

NAL Call No: TD171.U5

### President Clinton's Clean Water Act Initiative: costs and benefits.

Luttner, M.

Washington, U.S. Environmental Protection Agency.

EPA journal v. 20 (1/2): p. 30-31; 1994.

*Language:* English

*Descriptors:* Legislation; Water quality; Water pollution; Costs

87

NAL Call No: TD172.5.A99 1990

### Proceedings, AWWA Seminar on Current Research Activities in Support of USEPA'S Regulatory Agenda, annual conference, Cincinnati, Ohio, June 17-21, 1990.

American Water Works Association, Research Division

AWWA Seminar on Current Research Activities in Support of USEPA's Regulatory Agenda 1990 : Cincinnati, Ohio.

Denver, CO : American Water Works Association,.

vi, 140 leaves : ill. ; 28 cm. Cover title. Includes bibliographical references.

*Language:* English

*Descriptors:* Environmental protection; Drinking water

88

NAL Call No: TD426.N37 1986

### Proceedings of a National Symposium on Liability Issues and Ground Water Pollution Control, May 22-23, 1986 conducted by the University of Oklahoma Environmental and Ground Water Institute and the Science and Public Policy Program in cooperation with other universities, sponsored by the U.S. Environmental Protection Agency Office of Ground Water Protection.

Canter, Larry W.

University of Oklahoma, Environmental and Ground Water Institute, University of Oklahoma, Science and Public Policy Programs, United States, Environmental Protection Agency, Office of Ground-Water Protection

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National Symposium on Liability Issues and Ground Water Pollution Control 1986 : Cambridge, Mass.  
Norman, Okla. : University of Oklahoma, vi, 166 p. : ill., maps ; 28 cm. September, 1986. Includes bibliographical references.

*Language:* English

*Descriptors:* Water, Underground; Water quality

89 NAL Call No: SB433.34.V8V47  
**Programs to protect the Chesapeake Bay and the turf industry.**  
Shank, R.F.  
Blacksburg, Va. : Virginia Cooperative Extension Service.  
Proceedings - Virginia Turfgrass Landscape Conference (31st): p. 82-86; 1991 Dec. Meeting held on January 14-17, 1991, Richmond, Virginia.

*Language:* English

*Descriptors:* Lawns and turf; Ecosystems; Water pollution; Algae; Environmental policy; Times

90 NAL Call No: ArUKF5627.A314P767 1991  
**Proposed guidance specifying management measures for sources of nonpoint pollution in coastal waters, proposed under the authority of Section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990.**  
United States, Environmental Protection Agency, Office of Water  
Washington, D. C. : United States Environmental Protection Agency, Office of Water., 1 v. (various pagings) : ill. ; 28 cm. Includes bibliographical references.

*Language:* English

*Descriptors:* Coastal zone management; Water; Marine pollution

91 NAL Call No: 292.9 C1282  
**Pros and cons of ground water management or "look out for some extremely bogus thinking."**  
Kidman, A.G.  
Riverside, Calif. : The Center.  
Report - California Water Resources Center, University of California (77): p. 155-163; 1992 Sep. In the series analytic: Changing practices in ground water management, the pros and cons of regulation. Proceedings of the 18th biennial conference on ground water, held September 16-17, 1991, Sacramento, California.

*Language:* English

*Descriptors:* California; Groundwater; Water management; Groundwater pollution; Regulation; Local government; State government; Public utilities; Organic compounds; Water policy; Courts; Wells; Collectivization; Ownership

92 NAL Call No: aSD11.A42  
**Protection and management of riparian areas through water quality programs in Arizona.**  
Randall, K.E.  
Fort Collins, Colo. : Rocky Mountain Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture.  
General technical report RM / (226): p. 107-111; 1993. In the series analytic: Riparian management: common threads and shared interests. Paper presented at a conference on Feb. 4-6, 1993, Albuquerque, New Mexico. Includes references.

*Language:* English

*Descriptors:* Arizona; Cabt; Rivers; Riverbank protection; Water pollution; Conservation; Regulations

93 NAL Call No: S544.3.V8V52  
**The protection of groundwater resources: action at the local level.**  
Blacksburg, Va. : Extension Division, Virginia Polytechnic Institute and State University.  
Publication - Virginia Cooperative Extension Service (462-010): 22 p.; 1990. Includes references.

*Language:* English

*Descriptors:* Virginia; Groundwater pollution; Water quality; Water resources; Environmental protection; Local government; Legislation; Programs

94 NAL Call No: RA565.A1J6  
**Reevaluation of dioxin bioconcentration and bioaccumulation factors for regulatory purposes.**  
Sherman, W.R.; Keenan, R.E.; Gunster, D.G.  
Washington, D.C. : Hemisphere Publishing.  
Journal of toxicology and environmental health v. 37 (2): p. 211-229; 1992 Oct. Includes references.

*Language:* English

*Descriptors:* U.S.A.; Chlorinated hydrocarbons; Kraft mill effluent; Water pollution; Water quality; Regulations; Methodology; Aquatic environment; Fishes; Animal tissues; Calculation

## Regulating Water Quality: Policy, Standards and Laws

**95** **NAL Call No: HC79.P55J6**  
**Regulating agricultural groundwater contamination: a comment.**

Miceli, T.J.; Segerson, K.

Orlando, Fla. : Academic Press.

Journal of environmental economics and management v. 25 (2): p. 196-200; 1993 Sep. Original article published in this journal, v. 22 (1), p. 1-11. includes references.

*Language:* English

*Descriptors:* Georgia; Cabt; Idaho; Cabt; Minnesota; Cabt; Vermont; Cabt; Groundwater; Environmental legislation; Regulations; Legal liability; Game theory; Dynamic models; Agricultural chemicals

*Abstract:* This comment argues that the model specification used by Wetzstein and Centner in a recent paper is not an appropriate representation of the problem of groundwater contamination from agricultural chemicals and that their conclusions regarding the efficiency of alternative liability rules are incorrect. In particular, the modified strict liability rule proposed by the authors will not lead to efficiency for what we argue is the correct model specification. Likewise, a pure negligence rule, which they argue is inefficient, is in fact efficient.

**96** **NAL Call No: 292.8 W295**  
**The regulation of groundwater quality with delayed responses.**

Kim, C.S.; Hostettler, J.; Amacher, G.

Washington, D.C. : American Geophysical Union. Water resources research v. 29 (5): p. 1369-1377; 1993 May. Includes references.

*Language:* English

*Descriptors:* Groundwater pollution; Pollution control; Groundwater; Water quality; Regulations; Dynamic models; Algorithms; Nitrogen fertilizers; Farm inputs; Leachates; Nitrates; Usage; Costs; Agricultural policy

*Abstract:* This research develops a dynamic model of input regulation in the presence of externalities that do not occur simultaneously with input use. The model is formulated to study the regulation of firms that apply fertilizer, where leachate from the application of fertilizer accumulates in groundwater over time. In the model we show the derivation of an optimal nitrogen user fee and the consequences of regulatory design when time lags between nitrogen application and nitrate contami-

nation are present. This research also responds to the need of developing a general solution algorithm for an optimal control model when the control variable exhibits a delayed response. A multistage solution algorithm presented in this paper is different from other studies in that a typical relationship is not assumed for the state and adjoint variables.

**97** **NAL Call No: 57.09 F41**  
**Regulation update, clean water & phosphogypsum.**

Johnson, K.

Glen Arm, Md. : Fertilizer Industry Round Table. Proceedings /. p. 98-100; 1992. Meeting held on October 26-28, 1992, Baltimore, Maryland.

*Language:* English

*Descriptors:* Phosphogypsum; Fertilizer industry; Water pollution; Pollution control; Regulations; Point sources

**98** **NAL Call No: 57.8 SO4**  
**Regulations generate business for resourceful dealers.**

Luporter, C.

St. Louis, Mo. : Solutions Magazine.

Solutions v. 37 (2): p. 28-31; 1993 Feb.

*Language:* English

*Descriptors:* U.S.A.; Pesticides; Testing; Businesses; Regulations; Federal government; Environmental impact; Water quality

**99** **NAL Call No: TD427.P35K44 1991**  
**Report to the Legislature on pesticides in ground water submitted pursuant to Special act 86-44. (Pesticides in ground water.)**

Keeney, Timothy R. E.

Connecticut, Dept. of Environmental Protection

Hartford? : Dept. of Environmental Protection,

22 p. : ill. ; 28 cm. Cover title. December 1991.

*Language:* English

*Descriptors:* Pesticides; Water, Underground

**100** **NAL Call No: KF3792.M58R62 1994**  
**Restoring the Big River a clean water act blueprint for the Mississippi.**

Robinson, Ann Y.; Marks, Robbin

Minneapolis, MN : Midwest Office, Izaak Walton

League of America ; Washington, D.C. : National

Office, Natural Resources Defense Council,

53 p. : ill. ; 28 cm. February 1994. Includes

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bibliographical references (p. 49-53).

*Language:* English

*Descriptors:* Mississippi River; Water quality management

**101** NAL Call No: 292.9 C1282  
**The role of law in managing ground water quality, why has it failed?**

Tarlock, A.D.

Riverside, Calif. : The Center.

Report - California Water Resources Center, University of California (77): p. 39-46; 1992 Sep. In the series analytic: Changing practices in ground water management, the pros and cons of regulation. Proceedings of the 18th biennial conference on ground water, held September 16-17, 1991, Sacramento, California. Includes references.

*Language:* English

*Descriptors:* California; Utah; Groundwater; Water quality; Regulations; State government; Federal government; Law; Urban areas; Rural areas; Groundwater pollution; Courts; Environmental impact; Ownership

**102** NAL Call No: TD201.U61  
**Safe Drinking Water Act Amendments of 1986.**

Cotruvo, J.A.

Carbondale, Ill. : The Council.

Water resources update / (77): p. 11-14; 1994 May.

*Language:* English

*Descriptors:* U.S.A.; Cabt; Drinking water; Legislation; Contaminants; Pollutants; Monitoring; Public health

**103** NAL Call No: 290.9 Am32P  
**Seepage: a GIS model for groundwater pollution potential.**

Richert, S.E.; Young, S.E.; Johnson, C.

St. Joseph, Mich. : American Society of Agricultural Engineers.

Paper / (92-2592): 15 p.; 1992. Paper presented at the "1992 International Winter Meeting sponsored by the American Society of Agricultural Engineers," December 15-18, 1992, Nashville, Tennessee. Includes references.

*Language:* English

*Descriptors:* Pennsylvania; Cabt; Groundwater pollution; Mathematical models; Evaluation; Screening; Geographical distribution; Decision making;

Environmental policy

**104** NAL Call No: QL461.A52

**State departments of agriculture: pesticide and environmental specialists of the 1990's.**

Whitford, F.; Neu, J.A.; Brousseau, B.; Hardy, T.N.; Impson, J.W.; Rider, D.A.

Lanham, Md. : Entomological Society of America. American entomologist v. 37 (1): p. 27-34. maps; 1991.

*Language:* English

*Descriptors:* Louisiana; U.S.A.; Pesticides; Legislation; Pollutants; Public health; Regulations; State government; Water pollution

**105** NAL Call No: GB1197.82.M67 1989  
**State groundwater protection policies a legislator's guide.**

Morandi, Larry B.; Schwoch, Sharon

National Conference of State Legislatures

Denver, Colo. : National Conference of State Legislatures.

ix, 80 p. ; 23 cm. May 1989. Includes tables. Includes references and an appendix.

*Language:* English

*Descriptors:* Water, Underground

**106** NAL Call No: SB433.34.V8V47  
**Stormwater management.**

Pokrifka, G.M.

Blacksburg, Va. : Virginia Cooperative Extension Service.

Proceedings - Virginia Turfgrass Landscape Conference (30th): p. 93-95; 1990 Dec. Meeting held January 15-18, 1990, Richmond, Virginia.

*Language:* English

*Descriptors:* Runoff water; Water management; Legislation; Pollutants; Water conservation

**107** NAL Call No: TD223.P369 1992  
**Surface water quality have the laws been successful?**

Patrick, Ruth

Princeton, N.J. : Princeton University Press.

xvii, 198 p. : ill., maps ; 25 cm. Includes bibliographical references (p. [158]-186) and index.

*Language:* English

*Descriptors:* Water quality; Water; Water quality management; Freshwater fauna

## Regulating Water Quality: Policy, Standards and Laws

**108**                      **NAL Call No: TD420.A1P7**  
**Technical guidance for implementing BMPS in the Coastal zone.**

Frederick, R.E.; Dressing, S.A.  
 Oxford ; New York : Pergamon Press, c1981-.  
 Water science and technology : a journal of the International Association on Water Pollution Research v. 28 (3/5): p. 129-135; 1993. Paper presented at the IAWQ First International Conference on "Diffuse (Nonpoint) Pollution: Sources, Prevention, Impact, Abatement." September 19-24, 1993, Chicago, Illinois. Includes references.

*Language:* English

*Descriptors:* U.S.A.; Cabt; Water pollution; Coastal areas; Technical aid; Guidelines; Pollution; Sources

**109**                      **NAL Call No: SB319.2.F6F56**  
**"The Guide": an industry response to new regulations.**

Lamberts, M.; Marewski, G.; Monteith, R.H.; Rabin, M.  
 S.I. : The Society.  
 Proceedings of the ... annual meeting of the Florida State Horticulture Society v. 102: p. 246-248; 1990 May. Proceedings held October 31-November 2, 1989, Tampa, Florida. Includes references.

*Language:* English

*Descriptors:* Florida; Regulations; Hazards; Labor; Nurseries; Pesticides; Water quality

**110**                      **NAL Call No: KF27.G655 1992c**  
**Thirty years after Silent spring status of EPA's review of older pesticides : hearing before the Environment, Energy, and Natural Resources Subcommittee of the Committee on Government Operations, House of Representatives, One Hundred Second Congress, second session, July 23, 1992.**

United States. Congress. House. Committee on Government Operations. Environment, Energy, and Natural Resources Subcommittee  
 Washington : U.S. G.P.O. : For sale by the U.S. G.P.O., Supt. of Docs., Congressional Sales Office; Y 4.G 74/7:P 43/5.  
 iii, 232 p. : ill. ; 24 cm. Distributed to some depository libraries in microfiche. Shipping list no.: 93-0353-P. Includes bibliographical references.

*Language:* English

*Descriptors:* Carson, Rachel 1907-1964 Silent spring; Pesticides; Pesticide residues in food

**111**                      **NAL Call No: 302.8 P11**  
**Tighter regulations spur design of zero-discharge recycled mills.**

Kohler, C.W.  
 San Francisco, Calif. : Miller Freeman Inc.  
 Pulp & paper v. 68 (5): p. 89-91; 1994 May.

*Language:* English

*Descriptors:* U.S.A.; Cabt; Pulp and paper industry; Recycling; Pollutants; Waste water; Factory effluents; Water conservation; Environmental legislation; Federal government

**112**                      **NAL Call No: TD420.A1P7**  
**Trace metal soil quality criteria to protect groundwater.**

Lee, J.; Chen, B.; Allen, H.E.; Huang, C.P.; Sparks, D.L.; Sanders, P.  
 Oxford : Pergamon Press.  
 Water science and technology : a journal of the International Association on Water Pollution Research and Control v. 26 (9/11): p. 2327-2329; 1992. In the series analytic: Water Quality International '92. Part 5 / edited by M. Suzuki, et.al. Proceedings of the Sixteenth Biennial Conference of the International Association on Water Pollution Research and Control held May 24-30, 1992, Washington, D.C.

*Language:* English

*Descriptors:* New Jersey; Soil pollution; Pollutants; Standards; Metals; Groundwater pollution; Soil; Adsorption; Soil ph; Mathematical models

**113**                      **NAL Call No: 100 Ar4M**  
**Trouble down along the river.**

Kingdon, L.B.  
 Tucson : Agricultural Experiment Station, University of Arizona.  
 Research report. p. 6-7; 1992. Includes references.

*Language:* English

*Descriptors:* Arizona; Cabt; Waste water treatment; Riparian vegetation; Federal government; River water; River regulation; Deserts; Law; State government; Effluents; Groundwater pollution; Habitat destruction

**114**                      **NAL Call No: ArUKF5569.A2U53 1992**  
**Uncovering the hidden resources groundwater**

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law, hydrology, and policy in the 1990s, June 15-17, 1992.

University of Colorado (Boulder), Natural Resources Law Center, Rocky Mountain Ground-Water Conference, Colorado Ground Water Association

Boulder, CO : Natural Resources Law Center, University of Colorado School of Law.

1 v. (loose-leaf) : ill. ; 30 cm. "Sponsored by Natural Resources Law Center, University of Colorado School of Law and the Rocky Mountain Ground-Water Conference, organized by the Colorado Ground-Water Association", P. [1]. Includes bibliographical references.

*Language:* English

*Descriptors:* Water, Underground; Water resources development

**115** NAL Call No: SB610.W39  
Use of ground water monitoring data for pesticide regulation.

Barrett, M.R.; Williams, W.M.; Wells, D.  
Champaign, Ill. : The Weed Science Society of America.

Weed technology : a journal of the Weed Science Society of America v. 7 (1): p. 238-247; 1993 Jan. Includes references.

*Language:* English

*Descriptors:* U.S.A.; Cabt; Water quality; Groundwater pollution; Pesticides; Leaching; Pesticide residues; Drinking water; Regulations; Health hazards; Contaminants; Quality standards; Monitoring

**116** NAL Call No: S544.3.V8V52  
Use of incentives to enhance water quality program effectiveness.

Kerns, W.R.  
Blacksburg, Va. : Extension Division, Virginia Polytechnic Institute and State University.  
Publication - Virginia Cooperative Extension Service (448-104): 12 p.; 1991. Includes references.

*Language:* English

*Descriptors:* Virginia; Water quality; Incentives; Environmental policy; Environmental protection; Pollutants

**117** NAL Call No: SB610.W39  
Use of modeling in developing label restrictions for agricultural chemicals.

Jones, R.L.

Champaign, Ill. : The Society.

Weed technology : a journal of the Weed Science Society of America v. 6 (3): p. 683-687; 1992 Jul. Paper presented at a Symposium on the, "Role of Modeling in Regulatory Affairs," at the Weed Science Society of America, February 4, 1991, Louisville, Kentucky. Includes references.

*Language:* English

*Descriptors:* Agricultural chemicals; Pesticides; Simulation models; Regulations; Labeling; Groundwater; Drinking water; Water quality

**118** NAL Call No: S589.7.E57 1994  
Virginia's integrated agricultural nonpoint source pollution control strategies.

Croghan, M.B.

St. Joseph, Mich. : American Society of Agricultural Engineers.

Environmentally sound agriculture : proceedings of the second conference : 20-22 April 1994 /. p. 17-21; 1994.

*Language:* English

*Descriptors:* Virginia; Cabt; Agricultural land; Water pollution; Point sources; Pollution control; Environmental protection; Water quality; Environmental policy; State government

**119** NAL Call No: TD172.I58 1978-no.2  
Wasserrecht im Umbruch [Water law in flux].

Institut für Gewerbliche Wasserwirtschaft und Luftreinhaltung (North Rhine-Westphalia, Germany)

Köln : Das Institut.

vi, 88 p. ; 21 cm. (IWL-Forum, 1978-2). Includes bibliographical references.

*Language:* German

**120** NAL Call No: KF3788.4.W37 1979  
Water pollution control.

Bureau of National Affairs (Washington, D.C.)

Washington : Bureau of National Affairs, 1979.

1 v. (loose-leaf) ; 26 cm. (BNA policy and practice series). Cover title. Has newsletter (1979-1986): Water pollution control ; Oct. 1986- : Air & water pollution control. Includes index.

*Language:* English

*Descriptors:* Water

**121** NAL Call No: TD745.U6 1992  
Water pollution state revolving funds insufficient

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to meet wastewater treatment needs : report to the Chairman, Committee on Public Works and Transportation, House of Representatives. (State revolving funds insufficient to meet wastewater treatment needs State revolving fund program.) United States. General Accounting Office; United States, Congress, House, Committee on Public Works and Transportation  
Washington, D.C. : The Office; GA 1.13:RCED-92-35.

83 p. : ill. ; 28 cm. Cover title. Running title: State revolving fund program. January 1992. GAO/RCED-92-35. "B-245465", P. [1]. Includes bibliographical references.

*Language:* English

*Descriptors:* Sewage

**122** **NAL Call No: TD420.A1P7**  
**Water protection in the pulp industry: Australian and central European situation.**

Kroiss, H. \u University of Technology, Karlsplatz, Austria

Oxford ; New York : Pergamon Press, c1981-.  
Water science and technology : a journal of the International Association on Water Pollution Research v. 29 (5/6): p. 33-48; 1994. Selected Proceedings of the 4th IAWQ Symposium on Forestry Industry Wastewaters, held June 8-11, 1993, Tampere, Finland. Includes references.

*Language:* English

*Descriptors:* Austria; Cabt; German federal republic; Cabt; Pulp and paper industry; Sulfate pulping; Sulfite pulping; Kraft mill effluent; Pulp mill effluent; Water pollution; Pollution control; Water quality; Waste water treatment; Biological treatment; Legislation

**123** **NAL Call No: TD424.35.T2W37**  
**Water quality concerns in the EC.**

Knoxville, Tenn. : Agricultural Extension Service, the University of Tennessee, Institute of Agriculture.

Water protection conservation management / v. 5 (3): p. 2-3; 1992 Aug.

*Language:* English

*Descriptors:* Water quality; Nitrates; Animal wastes; Nitrogen fertilizers; Application; Guidelines

**124** **NAL Call No: 79.9 C122**  
**Water quality management planning for pes-**

ticides used in trees and vines.

Pepple, M.W.

Fremont, Calif. : California Weed Conference.

Proceedings / v. 46: p. 81-87; 1994. Meeting held January 17-19, 1994, San Jose, California.

*Language:* English

*Descriptors:* Pesticides; Environmental legislation; Water quality; Woody plants; Pesticide residues; Groundwater pollution

**125** **NAL Call No: aSD11.A42**  
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